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?show files;ds
File 347:JAPIO Oct 1976-2003/Sep(Updated 040105)
         (c) 2004 JPO & JAPIO
File 350:Derwent WPIX 1963-2004/UD,UM &UP=200402
         (c) 2004  Thomson Derwent
File 371:French Patents 1961-2002/BOPI 200209
         (c) 2002 INPI.  All rts. reserv.

Set     Items   Description
S1    2362511   ELECTRIC OR HYBRID OR INTERNAL()COMBUSTION OR EV OR HEV OR
               FUEL()CELL OR IC OR ICE OR BATTER??? OR SOLAR OR INSIGHT OR P-
               RIUS OR HYBRIDELECTRIC
S2     207838   BRAKE? ? OR BRAKING
S3    1248087   AXLE? ? OR WHEEL? ? OR AXEL? ? OR SHAFT? ? OR AXLETREE? ?
S4    4997673   FRICTION OR DRAG OR RESISTANCE OR ABRASION OR DRUM? ? OR D-
               ISC? ? OR DISK? ? OR BLOCK? ? OR BAND? ? OR SHOE? ? OR PAD OR
               PADS OR AIR OR HYDRAULIC OR VACUUM
S5     160518   REGENERATIVE OR THERMAL()RESISTOR OR DISSIPAT???(N)POWER OR
                (RECAPTUR??? OR RECOVER??? OR REUS??? OR RE()(USE OR USES OR
               USING OR CLAIM???) OR RECLAIM???)(3W)ENERGY OR DYNAMIC OR REC-
               UPERATIVE
S6     327743   S3(5N)(TWO OR 2 OR SECOND OR 2ND OR DUPLICATE? ? OR DOUBLE?
                ? OR TWOFOLD OR DUAL OR PAIR OR FIRST OR 1ST OR SEPARATE OR -
               DISCRETE OR DISTINCT OR ANOTHER OR DIFFERENT OR OTHER OR ADD??
                OR ADDITIONAL)
S7      66719   S2(5N)S4
S8       4726   S2(5N)S5
S9         17   S1(S)S6(S)S7(S)S8
S10     47634   IC=(B60T-008? OR B60L-007? OR H02K-049? OR H02P-003?)
S11        17   S9 AND S10
S12        17   IDPAT (sorted in duplicate/non-duplicate order)
S13        16   IDPAT (primary/non-duplicate records only)
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13/3,K/7 **(Item 7 from file: 350)**
DIALOG(R)File 350:Derwent WPIX

010082302 **Image available**
WPI Acc No: 1994-350015/199444
XRPX Acc No: N94-274630

Braking system for electric car - has twin circuit hydraulic brakes with auxiliary pressure source, plus retardation and energy recovery from drive motor

Patent Assignee: ITT AUTOMOTIVE EURO GMBH (INTT)
Inventor: BERTHOLD T; FEIGEL H; GRAEBER J; KIRCHER D
Number of Countries: 017 Number of Patents: 006
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
DE 4314448	A1	19941110	DE 4314448	A	19930503	199444	B
WO 9425322	A1	19941110	WO 94EP1341	A	19940428	199444	
EP 695251	A1	19960207	EP 94915138	A	19940428	199610	
			WO 94EP1341	A	19940428		
EP 695251	B1	19971001	EP 94915138	A	19940428	199744	
			WO 94EP1341	A	19940428		
DE 59404219	G	19971106	DE 504219	A	19940428	199750	
			EP 94915138	A	19940428		
			WO 94EP1341	A	19940428		
US 5769509	A	19980623	WO 94EP1341	A	19940428	199832	
			US 95545749	A	19951101		

Priority Applications (No Type Date): DE 4314448 A 19930503
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 4314448	A1		6	B60T-011/10	
WO 9425322	A1	G	21	B60T-013/58	
Designated States (National): US					
Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE					
EP 695251	A1	G	1	B60T-013/58	Based on patent WO 9425322
Designated States (Regional): DE FR GB					
EP 695251	B1	G	8	B60T-013/58	Based on patent WO 9425322
Designated States (Regional): DE FR GB					
DE 59404219	G			B60T-013/58	Based on patent EP 695251
					Based on patent WO 9425322
US 5769509	A			B60T-008/00	Based on patent WO 9425322

...Abstract (Equivalent): Brake unit for motor vehicles with *electric* drive and with a driven axle and a non-driven *axle*, comprising: (a) a *two*-circuit master brake cylinder (2), which can be actuated by means of a brake pedal (1), and to which both the *friction* *brakes* (3,4, 5,6) associated with the driven axle and with the non-driven axle are connected; (b) an electro-*regenerative* *brake* system which uses the *electric* drive motor (10) of the motor vehicle for braking and energy recovery; and (c) an *electric* controller (8), which receives information on the state of actuation of the master brake cylinder...

...of the vehicle, and evaluates it to control both the drive motor (10) and the *friction* *brakes* (5,6) acting on the driven axle, characterised in that the *friction* *brakes* (3,4) acting on the non-driven *axle* are connected to the *first* pressure space (22) of the master *brake* cylinder (2) and the *friction* *brakes* (5,6) acting on the driven *axle* are connected to the *second* pressure space (23) of the master brake cylinder (2), wherein the connection between the second pressure space (23) and the *friction* *brakes* (5,6) acting on the driven axle is performed by at least one shut-off ...

...which can be switched over electrically and is open in the currentless

state, and the *friction* *brakes* (5,6) acting on the driven axle are connectable to a hydraulic energy supply unit...
International Patent Class (Main): *B60T-008/00*...
...International Patent Class (Additional): *B60L-007/24*...

...*B60L-007/26*...

...*B60T-008/32*...

...*B60T-008/48*

13/3,K/8 (Item 8 from file: 350)
DIALOG(R)File 350:Derwent WPIX

009343855 **Image available**
WPI Acc No: 1993-037318/199305
XRPX Acc No: N93-028515
Hydraulic braking system for motor vehicle with electric drive - designed in form of multi-circuit compound braking system consisting of hydraulic friction brakes and electro-regenerating braking system
Patent Assignee: TEVES GMBH ALFRED (TEVE); ITT AUTOMOTIVE EURO GMBH (INTT)
Inventor: BALZ J; DROTT P; KLEIN H; LOHBERG P
Number of Countries: 015 Number of Patents: 006
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
DE 4124496	A1	19930128	DE 4124496	A	19910724	199305	B
WO 9301959	A1	19930204	WO 92EP1681	A	19920723	199307	
EP 595961	A1	19940511	EP 92916186	A	19920723	199419	
			WO 92EP1681	A	19920723		
EP 595961	B1	19951004	EP 92916186	A	19920723	199544	
			WO 92EP1681	A	19920723		
DE 59203919	G	19951109	DE 503919	A	19920723	199550	
			EP 92916186	A	19920723		
			WO 92EP1681	A	19920723		
US 5472264	A	19951205	WO 92EP1681	A	19920723	199603	
			US 94182014	A	19940124		

Priority Applications (No Type Date): DE 4124496 A 19910724
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 4124496	A1		12	B60T-011/10	
WO 9301959	A1	G	34	B60T-001/10	
Designated States (National): US					
Designated States (Regional): AT BE CH DE DK ES FR GB GR IT LU MC NL SE					
EP 595961	A1	G	34	B60T-001/10	Based on patent WO 9301959
Designated States (Regional): DE FR GB					
EP 595961	B1	G	18	B60T-001/10	Based on patent WO 9301959
Designated States (Regional): DE FR GB					
DE 59203919	G			B60T-001/10	Based on patent EP 595961
					Based on patent WO 9301959
US 5472264	A		15	B60T-011/10	Based on patent WO 9301959

...Abstract (Equivalent): A brake unit for automotive vehicles with *electric* drive, with a driven and a non-driven *axle* of vehicle *wheels*, with a *first* set of hydraulic friction brakes individually associated with said vehicle wheels of said driven *axle*, and with a *second* set of hydraulic friction brakes individually associated with said vehicle wheels of said non-driven...

...multiple-circuit compound system consisting of said first set and said second set of said *hydraulic* friction *brakes* and an electro-*regenerative* *brake* system, said electro-*regenerative* *brake*

system utilizing an *electric* driving motor of the automotive vehicle for braking and for energy recovery, and three brake...

...comprised of a pedal-actuated brake pressure master unit and of said second set of *hydraulic* *friction* *brakes*, a second *brake* circuit which is constituted by the electro-*regenerative* *brake* system which is directly or indirectly coupled to a brake pedal and which acts upon ...

...driven wheels, and a third brake circuit which is comprised of said first set of *hydraulic* *friction* *brakes* and is coupled to the brake pedal, wherein an electronic controller which is fed with...

...of the brake pedal, on vehicle speed and on the charging condition of the vehicle *batteries* and evaluates said information for controlling said second brake circuit and said third brake circuit...
...for controlling the distribution of the brake power to said driven and said non-driven *axles*, characterized in that said *first* set of *hydraulic* *friction* *brakes* in a way isolated hydraulically from the brake pressure master unit, are connected to at...
...International Patent Class (Additional): *B60L-007/18*...

...*B60L-007/24*...

...*B60T-008/18*...

...*B60T-008/32*

13/3,K/10 (Item 10 from file: 347)
DIALOG(R)File 347:JAPIO

07608262 **Image available**
HYBRID VEHICLE

PUB. NO.: 2003-102108 [JP 2003102108 A]
PUBLISHED: April 04, 2003 (20030404)
INVENTOR(s): NAKABAYASHI SEIICHI
SEO NOBUHIDE
TAKAKURA KENJI
KANEISHI JUNJI
APPLICANT(s): MAZDA MOTOR CORP
APPL. NO.: 2001-293151 [JP 20011293151]
FILED: September 26, 2001 (20010926)

INTL CLASS: B60L-011/14; B60K-006/02; B60K-017/356; B60K-041/00; B60K-041/28; *B60L-007/24*; *B60T-008/00*; F02D-029/00; F02D-029/02; F02D-029/06

ABSTRACT

PROBLEM TO BE SOLVED: To provide a *hybrid* vehicle, which makes braking feed different, due to cancellation of *regenerative* *braking*.
SOLUTION: The *hybrid* vehicle 1, whose *two* *wheels* 10, 10 are driven by an engine 2 at all times and the *two* *wheels* driven by a drive motor 6 driven by a *battery* 4 under prescribed conditions to be four-wheel drive, is equipped with a storage means 24 which bolts a clutch 18 at all times and charges the *battery* when a road surface friction factor is small, an energy recovery means which charges the *battery* by conducting *regenerative* *braking*, when slowing down, and a *regenerative* control means 24 which controls *regenerative* *braking*, when the road surface *friction* factor is smaller the prescribed value.

13/3,K/11 **(Item 11 from file: 347)**
DIALOG(R)File 347:JAPIO

07235706 **Image available**
BRAKING/DRIVING FORCE CONTROL DEVICE FOR VEHICLE

PUB. NO.: 2002-104156 [JP 2002104156 A]
PUBLISHED: April 10, 2002 (20020410)
INVENTOR(s): SHIMADA MICHIHITO
NIWA SATORU
SAKAMOTO JUNICHI
HARA MASAHIRO
APPLICANT(s): TOYOTA MOTOR CORP
APPL. NO.: 2000-294739 [JP 2000294739]
FILED: September 27, 2000 (20000927)

INTL CLASS: *B60T-008/00*; *B60L-007/10*; *B60L-007/24*; B60L-011/14; *B60T-008/58*

ABSTRACT

...calculated based on the smaller final desired braking pressure (S50, 60, and 80), a desired *friction* *braking* pressure achieving a desired *braking* force corresponding to the final desired braking force of the vehicle in cooperation with the *regenerative* *braking* about the wheel having the larger final desired braking pressure is calculated, and a desired *friction* *braking* pressure of *another* *wheel* is set zero (S70 and 90). A desired driving torque PTf of the front wheel...

... front wheels under the traction control (S100 and 110), the braking/driving force of a *hybrid* engine 10 is controlled based on final desired braking/driving torque KFTf (=PTf-KTf) of the front wheel's axle (S120), and *friction* *braking* pressures of the right and left front wheels are controlled to the desired *friction* *braking* pressure (S130).

13/3,K/12 **(Item 12 from file: 347)**
DIALOG(R)File 347:JAPIO

05623605 **Image available**
BRAKING DEVICE

PUB. NO.: 09-238405 [JP 9238405 A]
PUBLISHED: September 09, 1997 (19970909)
INVENTOR(s): KIMURA AKIYOSHI
SHIOYAMA SHUICHIRO
APPLICANT(s): UNISIA JECS CORP [358427] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 08-045061 [JP 9645061]
FILED: March 01, 1996 (19960301)

INTL CLASS: B60L-011/18; *B60L-007/12*; B60T-017/00

ABSTRACT

... by a braking means which consists of driving motors 6a and 6b and includes a *battery* *regenerative* *braking* means B instead of a *hydraulic* *braking* means on the rear wheel 3 side. On the front *wheel* *2* side, the car is *braked* by a *hydraulic* *braking* means which has a tandem master cylinder 7 having two hydraulic systems 7a and 7b...
... are connected to the respective systems 7a and 7b and are provided on the respective *wheels* *2*.

13/3,K/13 **(Item 13 from file: 347)**
DIALOG(R)File 347:JAPIO

05478912 **Image available**
METHOD AND APPARATUS FOR BRAKING ELECTRIC VEHICLE

PUB. NO.: 09-093712 [JP 9093712 A]
PUBLISHED: April 04, 1997 (19970404)
INVENTOR(s): SHIMIZU HIROSHI
ASHIKAGA TADASHI
MATSUMURA YOSHIHIRO
HAKE MOTOMU
APPLICANT(s): SHIMIZU HIROSHI [000000] (An Individual), JP (Japan)
KOGAI KENKO HIGAI HOSHIYOU YOBOU KYOKAI [000000] (A Japanese Company or Corporation), JP (Japan)
MEIDENSHA CORP [000610] (A Japanese Company or Corporation), JP (Japan)
NABCO LTD [000401] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 07-266416 [JP 95266416]
FILED: September 19, 1995 (19950919)

INTL CLASS: *B60L-007/24*; *B60T-008/26*

ABSTRACT

...SOLUTION: At least at the time of initial *braking*, the *hydraulic* *braking* of drive wheels 4 which make it possible to be connected to a motor 6 and driven with a *battery* 8 as an energy source and hydraulically braked and regeneratively braked by the operation of a *brake* pedal 18 and the *hydraulic* *braking* of driven *wheels* *2* which make it possible to be hydraulically braked by the operation of the pedal 18 are inhibited, and the *regenerative* *braking* of the drive wheels 4 are operated. When the *regenerative* *brake* forces of the drive wheels reach a predetermined value BE1 of less than the maximum value, the *hydraulic* *braking* of the *wheels* *2* is started, and the brake force distribution of the *wheels* *2* and 4 is brought into coincidence with the preset ideal distribution approximate characteristics before the *regenerative* *brake* force of the wheels exceeds the maximum value.

13/3,K/14 **(Item 14 from file: 347)**
DIALOG(R)File 347:JAPIO

05478911 **Image available**
METHOD AND APPARATUS FOR BRAKING ELECTRIC AUTOMOBILE

PUB. NO.: 09-093711 [JP 9093711 A]
PUBLISHED: April 04, 1997 (19970404)
INVENTOR(s): SHIMIZU HIROSHI
ASHIKAGA TADASHI
MATSUMURA YOSHIHIRO
HAKE MOTOMU
APPLICANT(s): SHIMIZU HIROSHI [000000] (An Individual), JP (Japan)
KOGAI KENKO HIGAI HOSHIYOU YOBOU KYOKAI [000000] (A Japanese Company or Corporation), JP (Japan)
MEIDENSHA CORP [000610] (A Japanese Company or Corporation), JP (Japan)
NABCO LTD [000401] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 07-266415 [JP 95266415]
FILED: September 19, 1995 (19950919)

INTL CLASS: *B60L-007/24*; *B60T-008/26*

ABSTRACT

...SOLUTION: At least at the time of initial *braking*, the *hydraulic* *braking* of drive wheels 4 which make it possible to be connected to a motor 6 and driven with a *battery* 8 as an energy source and hydraulically braked and regeneratively braked by the operation of a *brake* pedal 18 and the *hydraulic* *braking* of driven *wheels* *2* which make it possible to be hydraulically braked by the operation of the pedal 18 are inhibited, and the *regenerative* *braking* of the drive wheels 4 are operated. When the *regenerative* *brake* forces of the drive wheels reach a predetermined value (a) of less than the maximum value, the *regenerative* *brake* force is held, the *hydraulic* *braking* of the *wheels* *2* are started, the *regenerative* *brake* force is held and continued until the brake force distribution of the *wheels* *2* and 4 is coincident with the preset ideal distribution approximate characteristics.

13/AN,AZ,TI/1 (Item 1 from file: 350)
DIALOG(R)File 350:(c) 2004 Thomson Derwent. All rts. reserv.

014315903
Braking control device for electric vehicle, has controller that regulates linear valve to generate differential pressure based on hydraulic pressure corresponding to regenerative braking power
Local Applications (No Type Date): JP 2000186700 A 20000621; US 2001884952 A 20010621; DE 1029594 A 20010620
Priority Applications (No Type Date): JP 2000186700 A 20000621

13/AN,AZ,TI/2 (Item 2 from file: 350)
DIALOG(R)File 350:(c) 2004 Thomson Derwent. All rts. reserv.

011757185
Damping device for electric vehicles - has boosting control valve provided between master cylinder and brake units, to close pressure passage, when input hydraulic pressure value exceeds minimum value
Local Applications (No Type Date): JP 96215309 A 19960725
Priority Applications (No Type Date): JP 96215309 A 19960725

13/AN,AZ,TI/3 (Item 3 from file: 350)
DIALOG(R)File 350:(c) 2004 Thomson Derwent. All rts. reserv.

010748568
Damper for electric vehicle e.g. motor car - has switching control part to operate hydraulic pressure adjustment part, in accordance with detected slip ratio
Local Applications (No Type Date): JP 94226392 A 19940921
Priority Applications (No Type Date): JP 94226392 A 19940921

13/AN,AZ,TI/4 (Item 4 from file: 350)
DIALOG(R)File 350:(c) 2004 Thomson Derwent. All rts. reserv.

010748567
Damping device for electric vehicle - uses braking hydraulic pressure detecting part to detect hydraulic pressure on sides of wheels when electric motor does not operate
Local Applications (No Type Date): JP 94226393 A 19940921
Priority Applications (No Type Date): JP 94226393 A 19940921

13/AN,AZ,TI/5 (Item 5 from file: 350)
DIALOG(R)File 350:(c) 2004 Thomson Derwent. All rts. reserv.

010748566
Damping device for electric vehicle - uses switching controller to control switching between hydraulic pressure braking and regenerative braking, based on output of condition detector
Local Applications (No Type Date): JP 94226391 A 19940921; JP 94226391 A 19940921
Priority Applications (No Type Date): JP 94226391 A 19940921

13/AN,AZ,TI/6 (Item 6 from file: 350)
DIALOG(R)File 350:(c) 2004 Thomson Derwent. All rts. reserv.

010405650
Electric-vehicle damping device - uses force controller to control frictional braking force based on resurrection circle
Local Applications (No Type Date): JP 93354657 A 19931229; JP 93354657 A 19931229

Priority Applications (No Type Date): JP 93354657 A 19931229

13/AN,AZ,TI/7 (Item 7 from file: 350)
DIALOG(R)File 350:(c) 2004 Thomson Derwent. All rts. reserv.

010082302
Braking system for electric car - has twin circuit hydraulic brakes with auxiliary pressure source, plus retardation and energy recovery from drive motor
Local Applications (No Type Date): DE 4314448 A 19930503; WO 94EP1341 A 19940428; EP 94915138 A 19940428; WO 94EP1341 A 19940428; EP 94915138 A 19940428; WO 94EP1341 A 19940428; DE 504219 A 19940428; EP 94915138 A 19940428; WO 94EP1341 A 19940428; WO 94EP1341 A 19940428; US 95545749 A 19951101
Priority Applications (No Type Date): DE 4314448 A 19930503

13/AN,AZ,TI/8 (Item 8 from file: 350)
DIALOG(R)File 350:(c) 2004 Thomson Derwent. All rts. reserv.

009343855
Hydraulic braking system for motor vehicle with electric drive - designed in form of multi-circuit compound braking system consisting of hydraulic friction brakes and electro-regenerating braking system
Local Applications (No Type Date): DE 4124496 A 19910724; WO 92EP1681 A 19920723; EP 92916186 A 19920723; WO 92EP1681 A 19920723; EP 92916186 A 19920723; WO 92EP1681 A 19920723; DE 503919 A 19920723; EP 92916186 A 19920723; WO 92EP1681 A 19920723; WO 92EP1681 A 19920723; US 94182014 A 19940124
Priority Applications (No Type Date): DE 4124496 A 19910724

13/AN,AZ,TI/9 (Item 9 from file: 350)
DIALOG(R)File 350:(c) 2004 Thomson Derwent. All rts. reserv.

007180371
Combined regenerative and friction braking system for locomotive - regulates operation of regenerative and friction braking systems and actuates latter when brake demand signal is sent
Local Applications (No Type Date): US 85799773 A 19851121
Priority Applications (No Type Date): US 85799773 A 19851121

13/AN,AZ,TI/10 (Item 10 from file: 347)
DIALOG(R)File 347:(c) 2004 JPO & JAPIO. All rts. reserv.

07608262
HYBRID VEHICLE

APPL. NO.: 2001-293151 [JP 20011293151]

13/AN,AZ,TI/11 (Item 11 from file: 347)
DIALOG(R)File 347:(c) 2004 JPO & JAPIO. All rts. reserv.

07235706
BRAKING/DRIVING FORCE CONTROL DEVICE FOR VEHICLE

APPL. NO.: 2000-294739 [JP 2000294739]

13/AN,AZ,TI/12 (Item 12 from file: 347)
DIALOG(R)File 347:(c) 2004 JPO & JAPIO. All rts. reserv.

05623605
BRAKING DEVICE

APPL. NO.: 08-045061 [JP 9645061]

13/AN,AZ,TI/13 (Item 13 from file: 347)
DIALOG(R)File 347:(c) 2004 JPO & JAPIO. All rts. reserv.

05478912
METHOD AND APPARATUS FOR BRAKING ELECTRIC VEHICLE

APPL. NO.: 07-266416 [JP 95266416]

13/AN,AZ,TI/14 (Item 14 from file: 347)
DIALOG(R)File 347:(c) 2004 JPO & JAPIO. All rts. reserv.

05478911
METHOD AND APPARATUS FOR BRAKING ELECTRIC AUTOMOBILE

APPL. NO.: 07-266415 [JP 95266415]

13/AN,AZ,TI/15 (Item 15 from file: 347)
DIALOG(R)File 347:(c) 2004 JPO & JAPIO. All rts. reserv.

05029811
BRAKE FOR ELECTRIC VEHICLE

APPL. NO.: 06-206658 [JP 94206658]

13/AN,AZ,TI/16 (Item 16 from file: 347)
DIALOG(R)File 347:(c) 2004 JPO & JAPIO. All rts. reserv.

04461506
BRAKE CONTROLLER FOR ELECTRIC MOTOR VEHICLE

APPL. NO.: 04-251300 [JP 92251300]